



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/039,299 | 01/02/2002 | Steven J. Harrington | D/A1096 XER 2 0436 | 2159 |

7590 01/21/2004

Joseph D. Dreher
Fay, Sharpe, Fagan,
Minnich & McKee, LLP
1100 Superior Avenue, 7th Floor
Cleveland, OH 44114-2518

EXAMINER

RAHMJOO, MANUCHER

| | |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2676

DATE MAILED: 01/21/2004

4

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/039,299

Applicant(s)

HARRINGTON, STEVEN J.

Examiner

Mike Rahmjoo

Art Unit

2676

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

Claim 1 is objected to because of the following informalities:

As per claim 1 line 10 on page 15 recites "...a single vertice...". The examiner assumes the word "vertice" is mis-spelled and it is "vertex".

Appropriate correction of this and other possible claims is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2- 5 and 10- 14 and 19- 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per claim 2 line 20 on page 15 recites "...maximum pixel value...". It is not clear what kind of value is being addressed and whether this value represents just a number of pixels or the number of attributes associated with the pixels.

Claims 3- 5 and 10- 14 and 19- 20 have similar rejections.

Further clarification of claims 3- 5 and 10- 14 and 19- 20 are respectfully requested.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1- 6, 9- 14, and 17- 21 are rejected under 35 U.S.C. 102(e) as being anticipated by Naegle et al(US Pub 2001/0033287), hereinafter, Naegle.

As per claims 1, 9 and 18 Naegle teaches scanning the array to determine the pixel values see for example figures 4- 5 and 8- 10 and page17 paragraph [0191]; segmenting the array into blocks of the pixel values see for example figures 4- 5, 8- 10, and 12 and paragraphs[0160] and [0194]; performing an associative operation on the pixel values of each block to determine properties of the each block see for example paragraphs [0076] and [0162]; storing the properties of the each block in a table see for

example figures 3 and 12 and paragraph [0162] and [0224]; providing a window defining a fixed size region of the image, the window having vertices and being configured such that a single vertex at most will be encompassed by any given block having portions within the fixed size region see for example paragraphs [0233] and [0235](graphics data comprising polygon information i.e., vertex data which is designed to use default sample mode as well as alternative sample mode such as one sample per pixel); determining which portions of which blocks are within the fixed size region see for example paragraph[0140](bin position corresponding to particular positions on the display and to the pixel centers) and figures 15- 17; selecting a property for each portion of each block within the fixed size region from the table based on the determining of which portions of which blocks are within the fixed size region and locations of the vertices of the window see for example paragraph [0221](window ID of each window attached to each sample or bin with color attributes); and performing the associative operation on the selected properties to determine an overall property for the fixed size region see for example paragraphs [0162] and [0224] (interpolation based upon the color and texture map information associated with the vertices of the triangle and then storing the sample in sample buffer).

As per claims 2- 3, and 10- 11 Naegle teaches performing the associative operation on the pixel values comprises determining maximum and minimum pixel values see for example paragraph [0185](filtering which ensures that the samples located the closest to the pixel center will contribute the most (maximum), while pixels located the far from the pixel center will contribute less (minimum) to the final output

pixel values which automatically performs anti-aliasing by smoothing any abrupt changes in the image (e.g., from a dark line to a light background).

As per claims 4- 5, 12- 13 and 19- 20 Naegle teaches performing the associative operation on the selected properties comprises performing an operation to determine a maximum and a minimum value see for example paragraph [0184] (the weighted sample may then be summed with a running total to determine the final output pixel's un-normalized (and pre-gamma correction) color value which may be appearing too bright (minimum value of a selected property) or too dark (maximum value of a selected property) by compensating for gain introduced by the convolution process).

As per claims 6, and 14 Naegle teaches providing a window defining a fixed size region of the image comprises providing a window having a rectangular shape see for example page 17, paragraph [0191].

As per claim 21 Naegle teaches the complex window is an annulus see for example figures 14 and 17.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 2676

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7, 8, 15, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Naegle et al(US Pub 2001/0033287), hereinafter, Naegle.

As per claims 7, 8, 15, and 16 Naegle teaches providing a window defining a fixed size region of the image comprises providing a window of rectangular shape.

However, Naegle does not teach an octagonal or hexagonal shape.

It would have been made obvious to one of ordinary skilled in the art at the time the invention was made to incorporate octagonal or hexagonal shape window based on design choice and the characteristics required by the user to do the specific tasks assigned by the user and therefore make it a versatile device.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure; US Pub 2001/0033287, and US Patent 5,086,496, 5,940,080, 6,232,981, and 5,900,860.

Inquiry

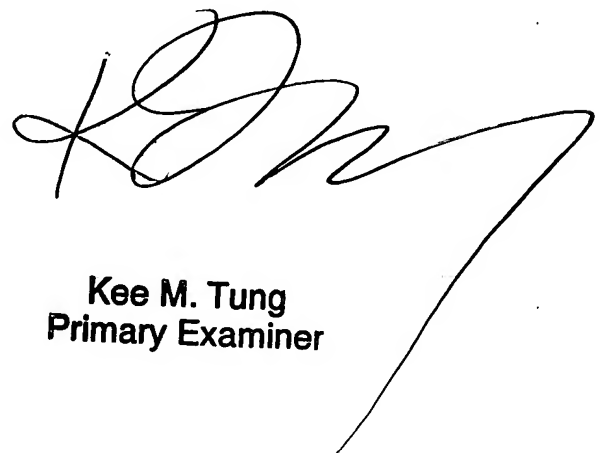
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mike Rahmjoo whose telephone number is (703) 305-5658. The examiner can normally be reached on 6:30- 3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Bella can be reached on (703) 308- 6829. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872- 9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4750.

Mike Rahmjoo

January 13, 2004



Kee M. Tung
Primary Examiner